

Serial No. 09/944,378  
Amdt. dated August 30, 2004  
Reply to Final Office Action of June 3, 2004

Docket No. K-0319

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A washing machine, comprising:
  - a first tank configured to contain washing water;
  - a second tank rotatably installed in the first tank;
  - a load section comprising at least one of a motor configured to drive the second tank, a water supply device configured to supply washing water, and a drain device configured to drain washing water;
    - a first microcomputer configured to control operation of the load section and to read an operation state of the load section;
    - an input section configured to receive a plurality of user input operation commands and to set a plurality of functions of the washing machine;
    - a display section configured to display the plurality of functions and an operation state of the washing machine;
    - an interface section connected to ~~the microcomputer~~ and an external device and configured to perform a data exchange ~~therebetween~~; [[and]]
      - a memory device configured to store operation history data of the load section; wherein the; and

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a second microcomputer coupled to the first microcomputer and the interface section, wherein the second microcomputer is configured to upload the stored operation history data to the external device, [[and]] to download a plurality of new washer operation parameters from the external device, and to store the downloaded parameters in the memory device.

2. (Previously Presented) The washing machine according to claim 1, wherein the memory device comprises a flash memory.

3. (Previously Presented) The washing machine according to claim 2, wherein the flash memory comprises a plurality of sectors, wherein one of the sectors is configured to store a program for data communication with the external device and a program for internal data communication in the washing machine, and wherein at least one of the sectors is comprises an empty sector, and at least one sector is configured to store washing courses and control-related programs.

4. (Previously Presented) The washing machine according to claim 1, wherein the external device comprises a personal computer or a server.

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5. (Previously Presented) The washing machine according to claim 1, wherein the external device and the interface section are connected by an RS-232C data communication cable.

6. (Currently Amended) A washing machine, comprising:

- an inner tank rotatably installed in an outer tank;
- a load section comprising at least one of a motor configured to drive the inner tank, a water supply device configured to supply washing water, and a draining device configured to drain washing water;
- a first microcomputer configured to control operation of the load section and to read an operation state of the load section;
- an input section configured to receive a plurality of operation commands and to set a plurality of functions of the washing machine;
- a display section configured to display the plurality of functions and an operation state of the washing machine; [[and]]
- a memory device configured to store operation history data of the load section; wherein; and
- a second microcomputer coupled to the first microcomputer, wherein the second microcomputer is configured to upload the stored operation history data to an external device,

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and to download a plurality of new washer operation parameters from the external device, and to store the downloaded operation parameters in the memory device.

7-33. (Cancelled)

34. (Previously Presented) The washing machine according to claim 1, wherein the input section comprises a keypad.

35. (Currently Amended) The washing machine according to claim 1, ~~further comprising a controller configured to control wherein the second microcomputer [[so as]] is~~ configured to execute an operation program corresponding to a function selected by a user, to control the display section so as to display a corresponding operation state, to store data transmitted through the first microcomputer or through the interface section to the memory device, and to upload information stored in the memory device to the external device through the interface section.

36. (Currently Amended) The washing machine according to claim 35, wherein the memory device is provided in a portion of the ~~controller~~ second microcomputer.

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37. (Currently Amended) The washing machine according to claim 36, wherein the ~~controller~~ second microcomputer further comprises a modem configured to enable data exchange via the Internet.

38. (Currently Amended) The washing machine according to claim 35, wherein the ~~controller~~ second microcomputer is configured to store wash related data selected by a user in the memory device.

39. (Currently Amended) The washing machine according to claim 38, wherein the washing machine is configured to be connected to the external device through the interface section, and wherein the ~~controller~~ second microcomputer is further configured to download an operation program from the external device based on the wash related data stored in the memory device.

40. (Currently Amended) The washing machine according to claim 35, wherein the ~~controller~~ second microcomputer is further configured to provide the user with a download failure notification on the display section if a download failure occurs.

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41. (Previously Presented) The washing machine according to claim 40, wherein one of the plurality of operation commands comprises a re-execution command when a download failure occurs.

42. (Previously Presented) The washing machine according to claim 1, wherein the plurality of new washer operation parameters comprise a plurality of washer operation programs configured to be changed based on changes in a wash related data portion of the operation history data.

43. (Previously Presented) The washing machine according to claim 42, wherein changes to the plurality of operation programs are stored as versions, and wherein the display section is further configured to display a version indicator for the operation program corresponding to the operation state of the washing machine.

44. (Previously Presented) The washing machine according to claim 1, wherein the uploaded operation history data of the load section comprises at least one of a temperature of the motor, a speed of the motor, a water supply time, and a water drain time.

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45. (Previously Presented) The washing machine according to claim 1, wherein the uploaded operation history data of the load section comprises operation records, including use and malfunction records, and conditions of various loads of the load section.

46. (Previously Presented) The washing machine according to claim 6, wherein the input section comprises a keypad.

47. (Previously Presented) The washing machine according to claim 6, wherein the uploaded operation history data comprises at least one of a temperature of the motor, a speed of the motor, a water supply time, and a water drain time.

48. (Currently Amended) The washing machine according to claim 6, wherein the first microcomputer is configured to control the operation of the load section based on the plurality of new washer operation parameters downloaded from the external device.

49. (Previously Presented) The washing machine according to claim 6, wherein the external device comprises a personal computer or a server.

50. (Currently Amended) The washing machine according to claim 6, wherein the operation history data of the load section comprises wash related data, and wherein the washing

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machine further comprises an interface section configured to connect the second microcomputer to the external device, and to send the wash related data to and receive wash related data from the external device.

51. (Previously Presented) The washing machine according to claim 6, wherein the memory device comprises a flash memory.

52. (Previously Presented) The washing machine according to claim 51, wherein the flash memory comprises a plurality of sectors, wherein at least one of the sectors is configured to store a program for data communication with the external device and a program for internal data communication in the washing machine, at least one of the sectors comprises an empty sector, and at least one sector is configured to store washing courses and control related programs.

53. (Currently Amended) The washing machine according to claim 6, wherein the external device and is connected to the second microcomputer through an RS-232C data communication cable.

54. (Currently Amended) The washing machine according to claim 6, wherein the second microcomputer further comprises a modem configured to enable data exchange via the Internet.

55. (Currently Amended) The washing machine according to claim 6, wherein the second microcomputer is further configured to provide the user with a download failure notification if a download failure occurs.

56. (Previously Presented) The washing machine according to 55, wherein one of the plurality of operation commands comprises a re-execution command when a download failure occurs.

57. (Previously Presented) The washing machine according to claim 6, wherein the plurality of washer operation parameters comprise a plurality of washer operation programs configured to be changed based on changes in a wash related data portion of the operation history data of the load section.

58. (Previously Presented) The washing machine according to claim 57, wherein changes to the plurality of operation programs are stored as versions, and wherein the display section is further configured to display a version indicator for the operation program corresponding to the operation state of the washing machine.

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59. (Previously Presented) The washing machine according to claim 6, wherein the uploaded operation history data of the load section comprises operation records, including use and malfunction records, and conditions of various loads of the load section.